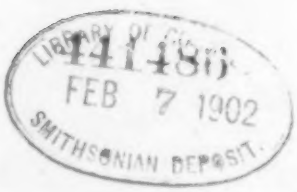
MUNICIPAL ENGINEERING

INDEX

July—December, 1900

VOLUME XIX



MUNICIPAL ENGINEERING COMPANY
INDIANAPOLIS, IND.
NEW YORK, N. Y.

TD1
.W3

INDEX
MUNICIPAL ENGINEERING.

VOLUME XIX. JULY—DECEMBER, 1900.

American Public Health Association, Twenty-Eighth Convention of 356
American Soc. C. E., Meeting of the..99, 131
American Society of Civil Engineers, Membership in, Charles Carroll Brown, M. Am. Soc. C. E..... 214
American Society of Municipal Improvements, Meeting of the....51, 97, 118, 217
Asphalt Bicycle Path, An..... 357
Asphalt Block Pavements, Information About, Charles Carroll Brown, M. Am. Soc. C. E..... 92
Asphalt Company, Financial Plans of the National 303
Asphalt in Minneapolis, Cost of Cleaning 235
Asphalt Lands, Right to 47
Asphalt Mixtures, The Value of Chemical Tests of, W. H. Broadhurst, Chemist, Department of Highways, New York City 182
Asphalt Pavements Damaged by Leaking Gas Mains 297
Asphalt Pavements, The Construction of, Geo. W. Tillson, M. Am. Soc. C. E. 179
Assessment Law in Iowa, Test of the Front Foot 232
Assessment Laws Invalid, Minneapolis Sewer 130
Assessment Law Sustained, Michigan's Foot Frontage 47
Assessment Laws Upheld, Improvement 127
Assessment Laws Urged by Chicago Real Estate People 126
Assessment on Property Cannot Afterward be Made if Improvement is Ordered at Public Cost 422
Assessment, Water Rates Based on Tax 47
Assessments, Benefits Must be Considered in Making Improvement..... 45
Assessments, Special, by the Front Foot—Recovery of Money Paid, C. W. Tooke, A. M., LL. B..... 28
Assessments, Why Sioux City Must Pay Deficiency in Paving..... 363
Barrett Law, a Federal Court Ruling on the 45
Barrett Law, Constitutionality of, again declared..... 424
Block Pavements, Filler for, Charles Carroll Brown, M. Am. Soc. C. E..... 211
Bookkeeping, The, of Public Service Industries, C. W. Tooke, Professor of Public Law, University of Illinois 7
Boston Public Work in 1899..... 381
Brick Pavements, Construction and Maintenance of, E. A. Kemmler, Assistant City Engineer, Columbus, O 197
Brick Pavements, Standard Construction of, A. D. Thompson, C. E..... 273
Brick Paving. Standard Methods of Construction and Tests of Materials for..... 277
Bridges for the Chicago Canal..... 298
Bridges of Cement and Steel, Charles Carroll Brown, M. Am. Soc. C. E... 24
Catalogues, Files of Business 303
Catch-Basins With Automatic Flaps, Charles Carroll Brown, M. Am. Soc. C. E. 25
Cement, A French Slag 357
Cement, A German Slag 349
Cement, English Definition of Portland 360
Cement From Slag, Process of Making 427
Cement, Government Definition of Portland 225
Cement Industry, German, Crisis in... 49
Cement, Reburning Damaged Portland 361
Cement, Model Specifications of and Tests for 18
Cement Sidewalks, Portland, Specifications for 16
Cement Testing for Municipal Work, Horace Andrews, M. Am. Soc. C. E., Albany, N. Y. 208
Cement, Standard Tests and Methods of Using 29
Cement Specifications for Sidewalks, John Brunner 86
Cement Streets in Bellefontaine..... 427
Cement, Tensile Strength of 283
Cement, Tensile Strength of Buckeye Portland 303
Cement Tests, Standard 93
Cement, Use of Slag for Making Portland 50
Cement Walk Surfaces, Checking of, Charles Carroll Brown, M. Am. Soc. C. E. 24
Cement Walks, How to Lay, So as to Avoid Cracks, Charles Carroll Brown, M. Am. Soc. C. E..... 23
Chicago Official, Temporary Injunction Restraining Discharge of..... 357
Cities, How to Build..... 155
Cities, Population of American..... 234
City, Founding a, Near Chicago..... 426
Civil Service Examination 426
Civil Engineering, the Profession of, John Findlay Wallace..... 114

15
263
Part 4

Concrete Mixer, A..... 303
Concrete Mixer, McKelvey..... 368
Concrete, Highway Bridges of, D. B. Luten, C. E..... 388
Concrete, Strength of, With Different Per Cent. of Voids Filled, William A. Hawley and B. F. Krahl..... 43
Corporations are Legally Separate, School and Civil..... 126
Corrosion, Dixon's Silica-Graphite Paint Protects from..... 366
Corrosion Copper Retards, of Soft Steel and Wrought Iron 425
Curb and Gutter. New Mold for Combined 303, 422
Damages for Pollution of a Stream, Entitled to..... 233
Damages for Removal of Poles and Wires. Decision Awarding Excessive Reversed..... 424
Detroit Public Works, Methods in..... 324
Distillation of Water Supply, Charles Carroll Brown, M. Am. Soc. C. E... 271
Distillation vs. Pumping, Charles Carroll Brown, M. Am. Soc. C. E..... 348
Draftsmen, Employment for..... 50
Drainage, Effect of Lake on Temperature 45
Drainage, Liability of City for Insufficient, C. W. Tooke, A. M., LL. B.... 416
Drought in New York..... 426
Electrical Engineers, Proposed Licensing of..... 126
Electric Current, a New Meter for 425
Electric Lightirg Companies, Rights of Competing..... 125
Electric Lighting in Washington..... 358
Electric Light Company for Damages, Liability of an 48
Electric Light Plant, Gasoline Engine for, Editor 410
Electric Light Plants for Small Cities, Charles Carroll Brown, M. Am. Soc. C. E..... 347
Electric Light Plants, The Telephone in 132
Electric Light, Reducing the Price of.. 232
Electric Plant Operated by a Gas Engine, A Central Station, J. C. Small 42
Electric Power Transmitted 153 Miles.. 424
Electric Railroads, The Third Rail, H. Andrews, M. Am. Soc. C. E..... 386
Electric Street Lighting, Statistics on.. 255
Electrolysis, Attitude of Courts on, C. W. Tooke, Professor of Public Law, University of Illinois 215
Electrolysis, Court Decisions On, C. W. Tooke, Professor of Public Law, University of Illinois 26
Electrolysis, Demand for Damages from 49
Electrolysis in Providence, Investigation of 231
Electrolysis in Seattle to be Investigated 358
Electrolysis, Some Facts and Figures Regarding, E. E. Brownell, C. E..... 74
Engineering and Surveying, Regulation of 46
Engineering, Correspondence Schools of, Charles Carroll Brown, M. Am. Soc. C. E. 214
Engineering Education, Society for the Promotion of..... 133
Factory of the Globe-Wernicke Company, New 54
Filter, A Method of Cleaning..... 279
Filter, Springfield Experimental 361
Filters at Lawrence, Mass., Cleaning... 234
Filtration Plant, An Experimental Water; Its Design, Use, Economy and Value, Floyd Davis, E. M., Ph. D..... 330
Filtration Plant at Philadelphia, The Experimental 128
Filtration, The English System of Water, Floyd Davis, E. M. Ph. D.... 394
Filtration, Water-Works Plants and, Charles Carroll Brown, M. Am. Soc. C. E. 272
Fire Hydrant, Consequences of Careless Use of 361
Fire Hose, Loss by Friction in, Charles Carroll Brown, M. Am. Soc. C. E.... 214
Flush Tanks, Facts Regarding the Use of, Charles Carroll Brown, M. Am. Soc. C. E. 93
Flush Tanks Should Be Discharged, How Often, Charles Carroll Brown, M. Am. Soc. C. E..... 23, 412
Franchise Indianapolis Hot Water and Lighting 363
Franchises Cannot be Granted by New Jersey Cities..... 420
Garbage Collection in Toronto, The System of, John Jones..... 392
Garbage Disposal, Wilson B. Strong.. 414
Garbage Disposal in China 133
Garbage Disposal in Small Cities, Charles Carroll Brown, M. Am. Soc. C. E. 348, 410
Garbage, Electric Treatment of 127
Garbage Disposal, Progress in Methods of 349
Garbage, How Properly to Collect and Dispose of, H. P. Sherer, Mayor, Ft Wayne, Ind 331
Gas Rates, Fitchburg, Fixed by Massachusetts State Light Commission..... 360
Gas, Fuel, Cannot be Sold for Lighting. 129
Gas Supply, Public, Alton D. Adams, M. A. I. E. E..... 282
Granite Block Pavements, Construction of, Josiah A. Briggs, Chief Engr. Dept. of Highways, Borough of Bronx, N. Y. City 184
Gravel Road Bonds, Defective 235
Gravel Road Petitions, Procedure on.... 357
Heating, Applications of Hot Water and Steam for..... 425
Heating, Central Station Hot Water.... 218
Heating Plants, Hot Water, Central, Charles Carroll Brown, M. Am. Soc. C. E..... 212
Heating Plants, Statistics on Hot Water and Steam. Editor..... 412
Heating, Utilization of Exhaust Steam for, H. J. Frith, Superintendent Electric Light and Heating Company, Watseka, Ill 363
Hydrant Rental, A City's Right to Reduce 49
Iron Workers, Examination of Structural 49
Lamp, The Chase Sign 367
Lamp, Phelps' Baby Filament..... 432
League of American Municipalities, Meeting of 428
League of American Municipalities, Promised Resignation of the Secretary of the 257
Licensing of Electrical Engineers, Proposed 126
Light Contract Upheld, A Water and.. 46

Light is the Best Policeman..... 424
Lighting Companies, Award of Prizes for Accounting Forms of 10
Lighting Companies, Model Forms of Accounting for Electric, John Lyle Clough 67
Lighting Companies, A Model System of Bookkeeping for Electric, John Lyle Clough 251
Lighting Company, An Elaborate System of Records for a, John Lyle Clough 326
Lighting Company, Appeal of a..... 49
Lighting Company, Some Record Books for a, John Lyle Clough..... 398
Lighting, The Solution of the Problem of Municipal, W. T. Hurd, D. D. S., ex-Mayor Boscobel, Wis. 329
Macadamizing, Use of Sandstone in, Charles Carroll Brown, M. Am. Soc. C. E. 25
Macadam, Tar 283
Macadam, Limestone for 368
Macadam Pavement at Hamilton, Tarred..... .... 362, 423
Machine-Made Editorial Indorsements, More 98
Machinery, Screening 53
Materials, A Day's Work in Handling, Charles Carroll Brown, M. Am. Soc. C. E. 26
Mathematics in Engineering Schools.. 404
Meters the Result of Investigation Into Unauthorized Use of Water in Chicago 362
Municipality, Removal of Telephone Wires by—The Law of Guernsey, C. W. Tooke, A. M. LL. B..... 28
Municipal Accounts and Reports, Uniform 97
Municipal Accounts and Reports, Uniform, M. N. Baker, New York City.. 336
Municipal Architecture in England 235
Municipal Associations., Multiplicity of 279
Municipal Ball Room, A..... 297
Municipal Code Commission on the Subject of Finance and Taxation, The Ohio, August Herrmann, Cincinnati, O..... 352
Municipal Commissions, Power to Tax Cannot be Conferred Upon..... 45
Municipal Corporations, Contracts of—Ultra Vires, C. W. Tooke, A. M. LL. B..... 274
Municipal Corporations for Service, Contracts of—Limitations of Indebtedness, C. W. Tooke, A. M. LL. B... 275
Municipal Data, Report of Committee on, Charles Carroll Brown, M. Am. Soc. C. E.. 174
Municipal Electric Corporations, Colorado's New Law Relating to..... 48
Municipal Electric Light Plants do not Pay Better, Why Some, Geo. D. Shepardson 103
Municipal Engineering, Grand Prize for 299
Municipal Engineering, Present Problems in..... 289
Municipal Employes, Control of..... 44
Municipal Home Rule, Its Scope and Limitations, Robert E. McMath, President Board of Public Improvements, St. Louis..... 205
Municipal Improvements..... 302
Municipal Indebtedness—Contract for Sewers, C. W. Tooke, A. M., LL. B... 277
Municipal Indebtedness, Limitation of —Law of Illinois, C. W. Tooke, A. M., LL. B..... 27
Municipal Lighting, The Solution of the Problem of, W. T. Hurd, D.
Municipal Management, How Politics Detrimentally Affects Efficiency In.. 32
Municipal Methods, Improvements of.. 281
Municipal Officials, Power of, Over Street Paving Strongly Upheld in Minnesota 127
Municipal Orchestra, A 298
Municipal Reports 51, 236, 300
Municipal Reports, Uniform 278
Municipal Sewerage Systems and Assessments, George T. Bouton 203
Municipal Societies, Combinations of.. 406
Municipal Statistics, Uniform Accounting and National, M. N. Baker. 210
Municipal Tax Secrets Revealed by the Census 276
New Orleans, Sanitary Improvements at 46
New Publications 238, 300, 365, 429
Oil for Street Sprinkling, Experiments in the Use of, Charles Carroll Brown, M. Am. Soc. C. E..... 22
Oil on Roads, Henry I. Budd, Comr. of Pub. Roads of N. J..... 26
Park Libraries 297
Pavement, Concrete Street, Editor.... 410
Pavement History of Lafayette, W. K. Eldridge, City Engineer, Lafayette, Ind.... 317
Pavement in Many Cities, Report on Street 130
Pavements, A British Engineer's Report on Wood and Asphalt 50
Pavements in Newark, N. J., Average Cost of 297
Pavements on Residence Streets, Minneapolis Joins in Narrowing 363
Pavement, Reconstruction of, Defined 423
Pavements, The Construction of Standard Medina Stone Block, E. A. Fisher, M. Am. Soc. C. E., City Engineer, Rochester, N. Y..... 285
Paving Assessments in Detroit, Decision on 231
Paving Contract Invalid, La Crosse.... 423
Paving Ordinances, A Serious Error in Publishing 128
Paving Ordinances, Brick, Upheld, La Crosse 126
Paving Practice in Lafayette, Recent, W. K. Eldridge, City Engineer..... 390
Permit to Open Streets, Gas company With Legislative Charter, Refused.. 425
Personal Notes 52, 134, 237, 301, 365, 430
Pointer for the Unsuspecting, A..... 33
Population of American Cities..... 234
PORTRAITS—
Andrews, Horace, M. Am. Soc. C. E... 209
Benzenberg, George H., Ex-Preident A. S. M. I..... .....121, 156
Broadhurst, W. H., Asphalt Chemist. 182
Cappelen, F. W., M. Am. Soc. C. E... 256
Eldridge, W. K., C. E.....124, 193
Fisher, E. A., M. Am. Soc. C. E..... 285
Fulton, D. L., Secretary A. S. M. I.. .. 122
Hermann, E. A..... 196
Hermann, August, Ex-President A. S. M. I..... ....121, 178
Kemmler, E. A. 187
Lewis, N. P., Ex-President A. S. M. I. 120
McClintock, John N., M. Am. Soc. C. E..... 199

McMath, Robert E., President A. S. M. I. 171
O'Brien, F. J., Treasurer A. S. M. I.. 173
Steece, Emmett 267
Tillson, George W., M. Am. Soc. C. E. 123, 180
Thompson, A. D., Ex-President A. S. M. I. 119, 160
Power, What Develops 136
Prizes, Architectural, Awarded 363
Public Work, Methods in Detroit..... 324
Public Works, Pittsburg's Director of Deposed 49
Rain, Not Responsible for Failure of.. 128
Rates, Public Control of, George McLean 41
Recent Inventions ..55, 134, 238, 305, 368, 432
Reclamation of New Jersey Salt Marshes, Prize Plans for a..... 359
Repairs and Reconstruction, Difference Between 297
Reservoir Accident, Causes of the Grand Rapids 125
River Pollution, Illinois 220
Rivers, Sanitary Investigations of Illinois 124
Road Rollers, Specifications for the Use of, Charles Carroll Brown, Am. Soc. C. E..... 270
Road Materials, National Testing Laboratory for..... 423
Road Making, Points in..... 422
Roads, Arguments on Good..... 400
Roads Improvement Convention, National..... 422
Roads, Initial Steps in Getting Good, Daniel B. Luten, Instructor in Roads and Pavements, Purdue University.. 1
Sand and Mortar Proportions, Moisture in..... 358
Sanitary Inspector in Australia, Female..... 231
Septic Tank Action, The Discovery of, Followed by Filtration, in Sewage Purification.. 420
Septic Tank in Sewage Purification... 52
Septic Tank, The Value of the..... 350
Sewage, A Comparison of Primitive and Modern Methods of Treating—The Cesspool, Leonard P. Kinnicutt, D. S..... 99
Sewage Disposal Along the Passaic.... 48
Sewage Disposal and Water Purification, John N. McClintock, Consulting Engineer..... 199
Sewage Disposal and Water Works, Books on, Charles Carroll Brown, M. Am. Soc. C. E..... 213
Sewage Disposal, Books on..... 296
Sewage Disposal, Liability for Damages from 46
Sewage Disposal, Methods of, Charles Carroll Brown, M. Am. Soc. C. E.... 212
Sewage Disposal Plants in America, Editor..... 414
Sewage, Pollution of Running Streams by 221
Sewage, Pollution of Running Streams by, C. W. Tooke, A. M., LL. B..... 87
Sewage Purification, E. A. Hermann, Sewer Commissioner, St. Louis 195
Sewage Purification in England, Recent Progress in 262
Sewage Purification, Septic Tank in... 52
Sewage, The Typhoid Bacilli in..... 296
Sewage Treatment Experiments in England 294
Sewerage and Sanitation, Report of the Committee on, W. K. Eldridge, C. E., Chairman 192
Sewerage, Books on 90
Sewer Assessment Laws Invalid, Minneapolis 130
Sewer Construction, Methods of, Charles Carroll Brown, M. Am. Soc. C. E. 22
Sewer, Inlets and Basins Part of, Editor..... 414
Sewer Maintenance, W. C. Parmley, C. E. 109
Sewer Outfall at Burlington, Iowa, The New 267
Sewer Pipe, Tests of 45
Sewer Specifications 95
Sewers, Rules or Tables for Determining Sizes of, Charles Carroll Brown, M. Am. Soc. C. E..... 26
Sewers, Sanitary Requirements of, Charles Carroll Brown, M. Am. Soc. C. E. 272
Specifications for Paint 53
Specifications, Steel, for Brooklyn Bridge Sustained by Court 361
Statistics of Water Plants, Value of Full 349
Statistics, Uniform Accounting and National Municipal, M. N. Baker..... 210
Stone, All About..... 54
Stone, Streets and Roads Made of Crushed, Charles Carroll Brown, M. Am. Soc. C. E..... 92
Stream, Entitled to the Full Flow of the 127
Stream Pollution, A Peculiar Case of.. 351
Stream Pollution in Pennsylvania, A Decision on..... 129
Stream Purifier, Stamp Mill Tailings as a..... 358
Street Brooms and Street Sweeper Rolls 53
Street Cleaning in St. Paul, New Methods of..... 48
Street Cleaning in Washington..... 233
Street Cleaning Problem, A., Editor.... 412
Street Hygiene, Study of..... 299
Street Intersections, Drainage Across, Charles Carroll Brown, M. Am. Soc. C. E..... 213
Street Paving, Power of Municipal Officials Over, Strongly Upheld in Minnesota 127
Street Railroads, Power of City to Regulate, C. W. Tooke, A. M., LL.B. 275
Street Signs, A New Plan for Locating, M. Nicholson, Asst. City Engr., Birmingham, Ala..... 22
Street Signs Imbedded in Sidewalks, C. H. Topp, City Engineer, Victoria, B. C..... 87
Street Sweeper, An Automobile..... 367
Street Sweeping Apparatus Manufacturers 135
Streets, Fifty Millions for, London.... 302
Streets, Firemen Refuse to Sweep..... 50
Streets, Minneapolis Joins in Narrowing Pavements on Residence.... 363
Streets, by Telegraph Company, Revocation of Permit to Occupy, C. W. Tooke, Am. LL. B..... 416
Streets, Validity of Petition for Opening, C. W. Tooke, LL. B..... 416
Streets, Width of..... 410
Surveying, Regulation of Engineering and 46

Taxation, Limit of, Not Applicable to Tax to Pay Judgments..... 419
Technical Meetings ..51, 134, 235, 299, 363 428
Thompson, Testimonial to A. D..... 420
Timber, A Method for the Preservation of, F. A. Kummer, Jun. Mem. Am. Soc. C. E..... 345
Track Elevation in Chicago and Washington 49
Track Elevation in Milwaukee, Proposed 360
Track Elevation in Newark..... 422
Track Elevation in Three Cities..... 298
Trade Notes 55, 136, 238, 304, 368, 432
Tunneling, Information on the Problem of, Charles Carroll Brown, M. Am. Soc. C. E..... 24
Underground Water, Damages to Farm by Pumping 426
Van Wyck, An Attempt to Depose Mayor 49
Van Wyck, Mayor, Exonerated 420
Village, A Progressive Ohio 235
Voltage of 30,200 Successfully Carried by Underground Cable, A..... 360
Wachusett Dam Contract..... 418
Water and Its Experimental Improvement, Impure and Unwholesome, Floyd Davis, E. M., Ph. D..... 69
Water and Light Contract Upheld, A.. 46
Water Board, Investigation of Massachusetts 128
Water Companies, Abridgement of the Powers of Pennsylvania 298
Water Companies to Enforce Regulations, Legal Right of, C. W. Tooke, Professor of Public Law, University of Illinois 216
Water Company Must Pay Damages for Lack of Pressure at Fire..... 418
Water Company, Interpretation of Contract of New Orleans with..... 417
Water Contract Protected by the Federal Courts, C. W. Tooke, A. M., LL. B..... 415
Water Diversion Law, New York's..... 47
Water from New Orleans Steam Plants, Discharge of 362
Water, Legal Right in Percolating.... 48
Water Mains, Cost of Maintenance of Vitrified Clay 50
Water Mains, Disinfection of..... 418
Water Mains for Fire Protection in Philadelphia..... 418
Water Mains, Cost of Cleaning..... 427
Water Meter System, Harrisburg's Experience with 430
Water Meters, City Engineer of Halifax Recommends 362
Water Pipe Systems, Serious Results from Defects in 34
Water Purification Experiments at Washington 219
Water Purification, Sewage Disposal and, John N. McClintock, Consulting Engineer 199
Water Rates Based on Tax Assessment 47
Water Rates Upheld by Court 233
Water Rent, Tenant Must Pay..... 419
Water Supplies, Improvements of, G. Bouscaren, C. E..... 259
Water Supplies in the United States, The Pollution of Public..... 337
Water Supply and Disease, The Relation Between the Geology of the Sources of, Marsden Manson..... 11
Water Supply for St. Louis, Proposed Mountain Springs 126
Water Supply, Gravity, Books on, Charles Carroll Brown, M. Am. Soc. C. E. 347
Water Supply, Inland Lakes Can Be Used for 234
Water Supply, Location of Wells for.. 408
Water Supply, Pollution of Underground..... 418
Water Supply of New York, The..... 228
Water Supply of the National Capitol.. 230
Water Supply, Relation of Forests to.. 223
Water, Unsuccessful Effort to Compel a City to Pay for..... 232
Water Waste Prevention 282
Water Works are Held to be Real Estate..... 296
Water Works, Books on Sewage Disposal and, Charles Carroll Brown, M. Am. Soc. C. E..... 219
Water Works, The Illinois Laws for the Construction of, C. W. Tooke, Professor of Public Law, University of Illinois..... 208
Wood Preserving Plant, The Creo-Resinate..... 367
Improvement and Contracting News—
Paving 57, 138, 240, 305, 370, 434
Sewers 62, 145, 244, 310, 374, 438
Water Works 64, 149, 246, 313, 376, 440
Bridges 65, 151, 248, 314, 377, 442
Parks 65. 152, 249, 315, 379
Street Lighting 65, 153, 249, 315, 379, 442
Garbage Disposal, Street Cleaning, Sprinkling 66, 152, 248, 315, 379, 443
Too late for Classification..... 153, 249, 315